

REMARKS

The Examiner's Action mailed on November 2, 2006, has been received and its contents carefully considered.

In this Amendment, Applicants have editorially amended the specification and claims 1-3 and 6. Claim 1 is the sole independent claim, and claims 1-6 remain pending in the application. For at least the following reasons, it is submitted that this application is in condition for allowance.

Claims 1, 3 and 6 were rejected for non-statutory obviousness double patenting over claims 1, 2 and 7 of US 6,705,521 B1. This rejection is respectfully traversed and is overcome by a Terminal Disclaimer filed herewith in accordance with 37 CFR §1.321(c), along with the requisite fee under 37 CFR §1.20(d).

Claim 1 was rejected under 35 USC §103(a) as obvious solely over *Freeny, Jr.* (US 2002/0188575 A1). This rejection is respectfully traversed.

The method of the present invention includes logging into and out of an automatic charging system. More specifically, and in a non-limiting example, before a car enters a toll road, the user calls a specific log in number of an automatic charging system through a cellular phone and then hangs up, and after leaving the toll road, the user calls a specific log out number. While the vehicle is logged in, when the car enters a cell covering a toll booth, the base station informs the billing center to automatically chargeback from an account connected to the phone or record a toll.

Consequently, claim 1 recites "*calling a specific number representing a log*

in of an automatic charging through an on-vehicle cellular communication equipment before a car enters a toll road or bridge and hanging up; and calling a specific number representing a log out of said automatic charging through said cellular phone in said car after leaving said toll road or bridge” (emphasis added).

Freeny, Jr., on the other hand, teaches only communicating billing charges via telephone, not logging in and out by calling a specific number when respectively entering and leaving a toll road or bridge. For example, see ¶ [0028] referenced in the Office Action:

[0028] The wireless cellular network links are shown in 45 and they direct the AWP unit 10 communication call charges to the billing data processing centers 50 via link 60. The toll booth 22 charges can be directed to this same central billing system 50 via standard phone lines 29 and connection 60 or they can be billed separately using the old legacy toll booth billing system.

The method of *Freeny, Jr.*, insofar as it relates to toll booths, is shown in FIG. 4 thereof, although most of the reference numerals used in that view are not even referred to in the specification, much less discussed. The operation of *Freeny, Jr.* with respect to toll booths is therefore assumed for present purposes to be similar to that of the generic method of FIG. 3, discussed in ¶¶ [0041] and [0042] thereof:

[0041] One of the more important benefits of the invention is that the modifications required to add the AWP unit 10 capability to the existing proximity service providers 20 such as mentioned above is even simpler than the modifications required to the existing digital wireless phone/pager or palm top computers. All that is required is a very simple rf, or LED Proximity Transmitter and Receiver Unit or

other bi-directional communication device, such as a physical docking or plug-in station for the AWP unit **10**, that includes a proximity converter unit that interfaces the AWP unit T/R signals with the existing legacy proximity service provider communication unit with the correct protocols. In FIG. 3 such a generic APTRU **20** is shown in terms of the AWP adapter unit **200** and the existing generic legacy system functions **280**. The legacy system functions **280** include an input unit (not shown) for reading at least one personal information code from a hard copy (e.g. credit card, debit card or the like) capable of being carried by an individual. The AWP adapter unit **200** has an AWP unit signal receiver unit **210** that receives the AWP unit **10** signals via one of the links **21, 23, 25 or 27**.

[0042] The receiver detected signals are sent to the demodulator unit **220** via line **212**. The demodulated signals are then sent to the proximity converter unit **230** via line **221** for interfacing with the legacy system unit **280** via line **232**. Signals going back to the AWP unit **10** are first sent from the legacy unit **280** via line **232** to the proximity converter unit **230**. The signal is then converted into the proper form for transmission and sent to the AWP modulator unit **240** via line **231**. The modulated signal is then sent to the low power AWP signal transmitter unit **250** which transmits back to the AWP unit **10** via one of the links **21,23,25, or 27**.

¶ [0043] of *Freeny, Jr.* notes that different reference numerals are used in

FIG. 4, but neglects to provide any key thereto. Further details specific to toll booth and gas pump embodiments are then given in ¶¶ [0048]:

[0048] The processes for utilizing the AWP unit **10** with the toll booth **22**, and the gas station pump **26** are similar to the processes for utilizing the AWP unit **10** with the ATM unit **24** and the store checkout station **28**, except as described hereinafter. *When the AWP unit 10 is being utilized with the toll booth 22, the auto activate mode unit 115 in the AWP unit 10 is turned on via link 116 when a signal is received by a T/R available signal detector unit located in the existing legacy phone capabilities 180. The personal information code and predetermined protocols are then transmitted to the toll booth unit 22 for automatic accounting of the toll booth charges, as discussed above. When the AWP unit 10 is being utilized with the gas station pump 26, the user transmits the personal information codes and predetermined protocols to the gas station pump 26 via the link 25 as best shown in FIGS. 1 and 6. The gas station pump 26 then transmits the personal information codes and predetermined protocols to a third party, such as a credit card company, via the link 29 for payment authorization prior to the pumping of the gas. When authorization is received, the gas station pump 26 is actuated to permit the user to pump the gas into his gas tank.*

(emphasis added)

The Office action alleges that it would have been obvious to have used “the toll booth application in a checkout station scenario”. However, the store checkout method shown in FIG. 7 of *Freeny, Jr.* does not differ appreciably from the toll booth method of FIG. 4. Further description of the store checkout embodiment of *Freeny, Jr.* is given, for example, in ¶¶ [0045] and [0046] thereof:

[0045] The AWPS 5 can be utilized as follows. The proximity service provider 20 can be the store checkout station 28 located at a point of use such as a grocery store for example. In this embodiment, the user carries the AWP unit 10 into the grocery store and then selects at least one product for purchase. The user transports the AWP unit 10 and the products to the store checkout station 28. The UPC code on the product is entered into the store checkout station 28, such as by scanning the UPC code with a suitable scanner. The UPC or unique code identifying the product can be batched in the store checkout station 28 while the UPC codes of other products are entered into the store checkout station or otherwise until the user's transaction is complete. A product checkout price is requested from the user for payment. The user then actuates the proximity services mode switch 110 (FIG. 2) to cause the AWP unit 10 to download the personal information code and predetermined protocols to the AWP store checkout adapter unit 600 of the checkout station 28 as discussed above with reference to FIGS. 2 and 7. If additional security is desired, the user can place one of his fingers on the finger print system 780 (FIG. 8) to generate the unique codes which are indicative of the user's fingerprint. The unique codes can then be downloaded or transmitted to the AWP store checkout adapter unit 600 as discussed above. The operation of the AWP unit 10 and the store checkout station 28 has been discussed above and will not be repeated for sake of brevity.

[0046] In any event, the personal information code, predetermined protocols, and possibly the unique fingerprint code, are transmitted from the store checkout station 28 to a third party, such as a credit card company, for automated payment verification as indicated by the line 29. If the personal information code and unique fingerprint code are valid and the transaction is authorized, the third party transmits a signal to this effect to the store checkout station 28 via the link 29 and the transaction will be effected.

Whatever else the store checkout embodiment teaches, it does not disclose “calling a specific log in number”, then “hanging up”, and then “calling a

specific log out number” as presently recited in claim 1.

Freeny, Jr. therefore fails to teach or suggest “calling a specific log in number representing a log in of an automatic charging system through an on-vehicle cellular phone before a car enters a toll road or bridge and hanging up; and calling a specific log out number representing a log out of said automatic charging system through said on-vehicle cellular phone after said car leaves said toll road or bridge” as recited in claim 1, or indeed any log in or log out process of any kind.

Nor would logging in and out of an automatic charging system by calling log in and log out numbers, and hanging up inbetween, have been obvious to one skilled in the art at the time the present invention was made, as it is not taught or suggested in the store checkout embodiment of *Freeny, Jr.*

Consequently, claim 1 patentably defines over *Freeny, Jr.* and is allowable, together with claims 2-6 that depend therefrom.

Claims 2-4 and 6 were rejected under 35 USC §103(a) as obvious over the combination of *Freeny, Jr.* with *Claus et al.* (US 5,310,999). This rejection is respectfully traversed.

Claims 2-4 and 6 depend from claim 1, and as *Claus et al.* fails to remedy the deficiencies of *Freeny, Jr.* with respect to claim 1, claims 2-4 and 6 are allowable for at least this reason.

Claim 5 was rejected under 35 USC §103(a) as obvious over the combination of *Freeny, Jr.* with *Claus et al.* and *Schofield et al.* (US 2006/0220817 A1). This rejection is respectfully traversed.

Claim 5 depends from claim 1, and as *Claus et al.* and *Schofield et al.* fail to remedy the deficiencies of *Freeny, Jr.* with respect to claim 1, claim 5 is allowable for at least this reason.

It is submitted that this application is in condition for allowance. Such action and the passing of this case to issue are requested.

Should the Examiner feel that a conference would help to expedite the prosecution of this application, the Examiner is hereby invited to contact the undersigned counsel to arrange for such an interview.

Should the remittance be accidentally missing or insufficient, the Commissioner is hereby authorized to charge the fee to our Deposit Account No. 18-0002, and advise us accordingly.

Respectfully submitted,

February 2, 2007

Date



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AMENDMENT

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